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Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

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DAVE MARTIN  
Secretary

RAJ SOLOMON, P.E.  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 29, 2011

George J. Rael  
Assistant Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Rd, MSA316  
Los Alamos, NM 87544

Michael J. Graham  
Associate Director Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: APPROVAL WITH MODIFICATIONS  
COMPLETION REPORT FOR REGIONAL AQUIFER WELL R-50  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID#NM0890010515  
HWB-LANL-10-060**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled *Completion Report for Regional Aquifer Well R-50* (Report) dated July, 2010 and referenced by EP2010-0271. NMED hereby approves the Report with the following modifications.


**1. Section 3.2, Chronological Drilling Activities for the R-50 Well, Drilling Activities at R-50 Borehole, page 4:**

As noted in this section, a drive shoe and a stainless-steel weight from a tagline were inadvertently left down-hole at approximately 555 and 570 feet below ground surface, respectively. An attempt was made to remove the shoe and weight by milling followed by drilling with a reaming bit and a tricone bit. As stated in this section, "*Stainless-steel shavings were observed in the discharge, and the*

*milling tool was removed from the hole, but the field crew was not optimistic that the entire piece of stainless-steel tagline weight had been cleared from the borehole". It is unlikely that the shavings from the shoe and weight migrated much further down-hole or to the regional water table. However, in order to support the representativeness of groundwater samples collected at R-50, the Permittees must monitor the trace-element hydrogeochemical conditions with attention to impacts from the possible presence of metal shavings from the shoe and/or stainless-steel weight.*

No revision of the Report is necessary. Please call Michael Dale of my staff at (505) 661-2673 if you have questions.

Sincerely,



John E. Kieling  
Acting Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
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File: Reading and LANL 2011 – R-50 Groundwater LANL-10-060